SOLUTIONS

· Axisymetric 2-D Model

Determine Outer Register Door Positioning (Swirl # < .3)

Determine Inner Register Vane Positioning (Swirl # > .6)

Maintain Total Burner Swirl # = .3

· Coal Flame Stabilizer

Swirl # = .8

· Optimize Burner Design

Conduct Burner Design Evaluation

Detail Swirler Design

Compute Aerodynamic Model

Conduct Finite Element Analysis